

Note: This document is a working draft in process. The Board of Medical Licensure has considered and discussed this proposed draft and has given it tentative approval, with the understanding that certain jurisdictional issues will be addressed. However, these guidelines have not been finally approved at this time.

Kentucky Board of Medical Licensure Report and Position Phototherapy and Photochemotherapy

Guidelines of care for phototherapy and photchemotherapy

I. Introduction

The development of guidelines will promote the continued delivery of quality care and assist those outside our profession in understanding the complexities and scope of care provided.

II. Definition

Phototherapy is exposure to nonionizing radiation for therapeutic benefit. It may involve exposure to UVB, UVA or various combination of UVB and UVA radiation.

Photochemotherapy (PUVA) is the therapeutic use of radiation in combination with a photosensitizing chemical. It currently involves the use of psoralens and UVA radiation. Treatment with these modalities may involve partial or whole-body exposure.

Phototherapy and psoralen photochemotherapy are administered in inpatient hospital settings, hospital clinics, day-care centers, and doctor's offices under medical supervision. Certain forms of phototherapy and photochemotherapy are used at home.

III. Qualifications

The safe and effective use of phototherapy and psoralen photochemotherapy requires the combination of the following:

- A physician knowledgeable about these modalities
- A trained staff to administer the treatments
- Informed and reliable patients
- Equipment that is safe, purpose-built, correctly maintained, and adequately monitored.

IV. Diagnostic criteria

Several steps are involved in determining whether phototherapy and/or psoralen photochemotherapy are indicated and appropriate for the patient.

A patient should have a level of disease or disability that warrants use of these treatments. Such disability may be physical, psychological, or both.

Disease on exposed and relatively hairless skin is most likely to respond to treatment. Certain sites require special consideration, such as the scalp, palm, soles, and genitalia. Disease of the palms and soles will favor psoralen photochemotherapy because of diminished penetration of UVB radiation at those sites.

Type of therapy varies with the disease, stage and degree of involvement, and general health. For instance, psoralen photochemotherapy may be especially helpful for treatment of psoriasis when plaques are thick but should be used with caution in the erythrodermic and pustular phases of the disease. Mild to moderate eczema may respond to phototherapy, but more severe disease to photochemotherapy.

There are other treatments for each indication for phototherapy and psoralen photochemotherapy. The risk/benefit ratio of these therapies must be considered.

Patients of any age may be treated with phototherapy and photochemotherapy. However, in children, photochemotherapy should only be used in special circumstances.

Phototherapy and photochemotherapy may be used in male and female patients. Photochemotherapy is contraindicated during breast-feeding and relatively contraindicated during pregnancy.

Photochemotherapy is a complicated treatment and should only be used in patients who are able to comprehend and comply with all instructions.

III. Documentation

- Use of photosensitizing drugs should be recorded.
- History of photosensitivity and connective tissue disease
- The area to be treated should be examined to assess extent of disease, detect existing skin cancer, assess nevi, evaluate any photoaging, and detect other signs of cutaneous disease.
- Required at the start of treatment with psoralen photochemotherapy and should be repeated yearly, or more often if there are abnormal findings.
- Biopsy and histologic examination of the skin may be indicated to establish the diagnosis.
- Serum antinuclear antibody. Advisable if there is suggestion of associated connective tissue disease by history or clinical examination. A positive result should be investigated by further serologic testing to eliminate the possibility of clinical or subclinical lupus erythematosus.
- A record should be kept documenting each patient's treatment, including exposure dose/time and area treated.

IV. Recommendations

UV phototherapy:

- exposure to UVB and/or UVA radiation using suberythemogenic or erythemogenic doses
- The initial doses of radiation are determined by skin typing or phototesting to determine erythematous responses. Before using an erythemogenic protocol, the

patient must be cautioned that the development of erythema is an integral component of the treatment.

Psoralen photochemotherapy:

- exposure to UVA radiation after medication with methoxsalen or trioxsalen given orally, topically, or in a bath.
- The doses of UVA radiation are intended to be suberythemogenic, but erythema is an inevitable consequence in a proportion of patients because of wide variation in individual absorption of methoxsalen. Patients should be warned of this risk.

Combination therapies:

- phototherapy and photochemotherapy may be used in combination with topical agents, such as tar, anthralin and corticosteroids, and systemic agents, such as retinoids and methotrexate.

Equipment:

- An appropriately designed UVA and/or UVB treatment unit should be used. The equipment must have been established in clinical trials to be safe and effective for the therapy being given.

Patient education

- Provide an explanation of the nature of treatment, potential benefits, short-, and long-term risks and the precautions that are necessary. This explanation may be reinforced by a handout, video, or other educational material.

Precautions

During treatment

- The eyes should be protected by wearing UV-blocking goggles. An occasional exception may be made in patients with recalcitrant disease of the eyelids or periorbital skin, and at the physician's discretion.
- The face, genitalia, and radiation-damaged skin should be shielded unless involved with significant disease.
- Trained personnel must be present throughout the treatment and be in a position to communicate with the patient

Before and after treatment with photochemotherapy

- Patients must wear UVA-blocking glasses, whenever using sunlight for illumination, from the time of exposure to psoralen until sunset that day. In addition, patients should be encouraged to wear UV-blocking glasses when exposed to sunlight on the following day.

- Patients should avoid unnecessary exposure to sunlight on days they receive treatment and should be discouraged from deliberate exposure to sunlight on nontreatment days.
- Patients should be encouraged to use sunscreen on exposed areas.
- During a course of therapy regular evaluation of patients is essential to assess response to therapy and the development of adverse effects. A prime aim of these evaluations is to keep the exposure dose of radiation to a minimum compatible with adequate control of disease.

V. Non-Physician Qualifications

A physician may delegate phototherapy and photochemotherapy to certified or licensed non-physician (PA, ARNP) in compliance with appropriate statutes and regulations. The physician must supervise the non-physician to protect the best interests and welfare of each patient.

- The supervising physician shall be physically present **on- site**, immediately available, and able to respond promptly to any question or problem that may occur while the procedure is being performed.
- It is the physician's obligation to ensure that, with respect to each procedure performed, the non-physician possesses the proper training in cutaneous medicine, the indications for the procedure, and the pre- and post- operative care involved.
- The supervising physician performs and documents an initial assessment prior to treatment and as needed during the course of therapy.
- The non-physician has satisfactorily completed a documented special education and training program on applicable safety, techniques and pre and post operative care which includes supervised practice and clinical skill competency.
- Continuing education for these procedures is ongoing and documented.

Revised 6/2005

